



CPR
CONSTRUCTION
PRODUCT
REGULATION
E_{ca}

EUROPEAN
INDUSTRY CABLES
IEC 60502-1
0,6 /1kV

90°
XLPE
90 °C

FLEXIBLE
CLASS 5
IEC 60228

CERTIFICATES
AENOR/BUREAU VERITAS
/KEMA-KEUR/CB/CE MARK

€
AVAILABLE
FROM STOCK



TOP CABLE

One of the leading brands in the
manufacture of electric cables.



Leonardo da Vinci, nr 1
08191 Rubí (Barcelona)
SPAIN

Tel +34 935 862 168
+34 935 862 169

sales@topcable.com
www.topcable.com/en/low-voltage-cables/power/RV-K/



POWERFLEX RV-K

The European flexible power cable for
low voltage industrial installations



Powerflex RV-K

The European flexible power cable for
low voltage industrial installations

Engineered
to meet
European
Industry
Requirements

Cross-linked Polyethylene (XLPE) insulation material mean that Powerflex RV-K is engineered to meet the most demanding industry requirements: flexibility, dry and wet electrical performance, chemical resistance, maximum and minimum temperature resistance, and extended lifespan of the cable installation.



STANDARDS & CERTIFICATES

Powerflex RV-K is a 0,6/1kV cable in accordance with International Standard IEC 60502-1, widely used throughout Europe. The cable is Aenor, Bureau Veritas, Kema-Keur and CB Certified.



MAX SERVICE TEMPERATURE: 90°C

The cross-linked polyethylene insulation (XLPE) raises the maximum conductor temperature to 90°C (vs 70°C in type NYY or PVC insulated cables).



MIN SERVICE TEMPERATURE: -40°C

Powerflex RV-K is designed to operate reliably even at -40°C in fixed installations (vs -15°C in the most common cables in the European market).



FLEXIBILITY

The use of Class 5 flexible copper conductors and flexible compounds makes Powerflex RV-K highly flexible. Flexible copper conductors don't creep under vibration conditions.



ELECTRICAL PERFORMANCE

The specific design of the Powerflex RV-K compound materials means it can be installed in almost all types of environmental conditions such as dry, wet areas, direct burial, outdoors and even immersed in water.



OVERLOAD CAPACITY

Powerflex RV-K cables withstand short-circuit temperatures up to 250°C, much higher than PVC insulated cables (only 160°C), at identical cross-section.



FIRE CONDITIONS PERFORMANCE

Powerflex cables are flame retardant (*), meeting IEC 60332-1 combustion testing requirements.



CHEMICAL RESISTANCE

The special PVC outer sheath provides an excellent protection against acid and base alkaline substances.



WEATHER RESISTANCE

The special PVC UV-protected outer sheath also provides excellent weather resistance and can be installed outdoors without damaging the lifespan of the cable installation.



IMMERSIBILITY

Powerflex RV-K can withstand damp conditions including total immersion in water (AD7), and also hot water. On the other side, copper conductors withstand moisture much better than any other conductor.



METER BY METER MARKING










For easy handling in installations and better stock management.



COST-EFFECTIVE

Powerflex RV-K cables not only exceed the performance characteristics required in today's European industrial markets, but they do so in a cost-effective way, as it requires less time and manpower when they are being installed and they have much higher current capacity than standard 70°C cables.

MOST COMMON POWER INDUSTRIAL CABLES INSTALLED ALL OVER EUROPE

	 	vs							
DESIGNATION	POWERFLEX RV-K		R2V	NY Y	N2XY	-	YmVK mb ss	XVB-F2	XV
VOLTAGE	0,6/1kV		0,6 1kV	0,6 1kV	0,6 1kV	0,6 1kV	0,6 1kV	0,6 1kV	0,6 1kV
CONDUCTOR	Class 5 (flexible)		Class 1-2	Class 1-2	Class 1-2	Class 1-2	Class 2	Class 1-2	Class 1-2
INSULATION	XLPE		XLPE	PVC	XLPE	XLPE	XLPE	XLPE	XLPE
OUTER SHEATH	PVC (flexible)		PVC	PVC	PVC	PVC	PVC	PVC-F2	PVC
OUTER SHEATH COLOUR	Black		Black	Black	Black	Black	Grey	Grey	Black
MAX SERVICE TEMPERATURE	90°C		90°C	70°C	90°C	90°C	90°C	90°C	90°C
MIN SERVICE TEMPERATURE	-40°C fixed installations		-15°C	-15°C	-15°C	-15°C	-15°C	-15°C	-15°C
SHORT-CIRCUIT TEMPERATURE	250°C (5 sec)		250°C (5 sec)	160°C (5 sec)	250°C (5 sec)	250°C (5 sec)	250°C (5 sec)	250°C (5 sec)	250°C (5 sec)
FIRE PERFORMANCE	Flame retardant (*)		Flame retardant	Flame retardant	Flame retardant	-	Fire retardant	Fire retardant	Flame retardant
STANDARD	IEC 60502-1		XP C32-321	VDE 0298 part 1	VDE 0276-603	BS5467	HD 604-4-D	NBN HD 604 part 4	NP-2363

* Fire retardant as IEC 60332-3 optionally as Powerflex Plus





POWERFLEX RV-K

Industrial flexible cable for power transmission.

IEC 60502-1 - UNE 21123-2

DESIGN

Conductor

Electrolytic copper, class 5 (flexible), based on

EN 60228 and IEC 60228.

Insulation

Cross-linked polyethylene (XLPE)

The standard identification of insulated conductors is the following:

1 x	Natural
2 x	Blue + Brown
3 G	Blue + Brown + Green/yellow
3 x	Brown + Black + Grey
3 x + 1 x	Brown + Black + Grey + Blue (reduced cross-section)
4 G	Brown + Black + Grey + Green/yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/yellow

Outer sheath

Flexible PVC, black colour.

APPLICATIONS

Powerflex RV-K cable is suitable for all types of low voltage industrial-type connections, in urban grids, building installations, etc. Its high flexibility makes the installation process substantially easier and, as a result, is particularly suitable for use in difficult layouts. It can be buried or installed in a tube as well as outdoors without requiring additional protection. This cable can withstand damp conditions including total immersion in water (AD7).



CHARACTERISTICS



Electrical performance

LOW VOLTAGE 0,6/1kV



Standard

IEC 60502-1 - UNE 21123-2



Approvals

CE
SEC
BUREAU VERITAS
AENOR
SASO
RoHS
KEMA KEUR



Thermal performance

Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).



Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.
Reduced emission of halogens. Chlorine <15%.
Reaction to fire CPR: E_{ca} according to EN 50575.



Mechanical performance

Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.



Chemical performance

Chemical & Oil resistance: Good.
UV Resistant: UNE 211605.



Water performance

Water resistance: AD7 Immersion



Other

Meter by meter marking.



Installation conditions

Open Air.
Buried.
In conduit.



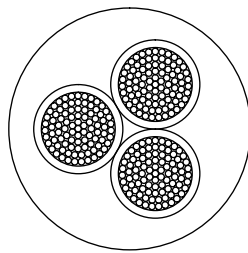
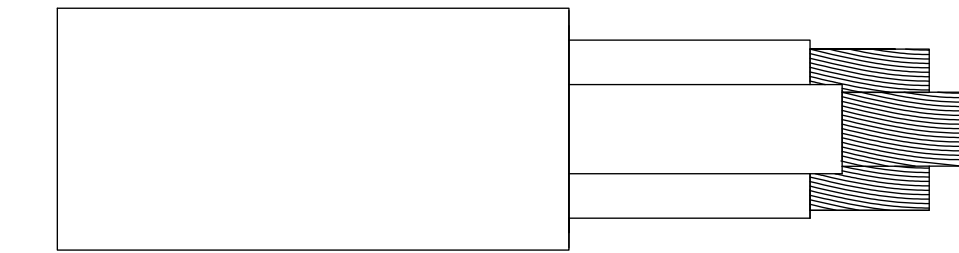
Applications

Industrial use.
Urban grids.



Packaging

Available in coils (lengths of 100 m) and drums.



DIMENSIONS

Cross section (mm2)	Diameter (mm2)	Weight (Kg/km)	Open Air: 30°C (A)	Buried 20°C (A)	Voltage drop (V/A · km)
1 x 1,5	5,7	45	23	22	29,5
1 x 2,5	6,2	55	29	29	17,7
1 x 4	6,7	70	40	37	11
1 x 6	7,3	90	53	46	7,32
1 x 10	8,2	135	74	61	4,23
1 x 16	9,2	190	101	79	2,68
1 x 25	11	285	135	101	1,73
1 x 35	12,1	385	169	122	1,23
1 x 50	13,8	520	207	144	0,86
1 x 70	15,7	715	268	178	0,603
1 x 95	17,6	925	328	211	0,457
1 x 120	19,2	1.165	383	240	0,357
1 x 150	21,5	1.450	444	271	0,286
1 x 185	23,9	1.750	510	304	0,235
1 x 240	26,9	2.280	607	351	0,178
1 x 300	29,6	2.830	703	396	0,142
1 x 400	33,8	3.735	823	464	0,108
1 x 500	37,4	4.780	946	525	0,085
1 x 630	42,7	6.280	1.088	596	0,064
2 x 1,5	8,2	90	26	26	34
2 x 2,5	9,2	120	36	34	20,4
2 x 4	10,3	165	49	44	12,7
2 x 6	11,3	215	63	56	8,45
2 x 10	13,2	320	86	73	4,89
2 x 16	14,9	450	115	95	3,1
2 x 25	20,8	810	149	121	1,99
2 x 35	22	1.000	185	146	1,42
2 x 50	25,7	1.375	225	173	0,99
2 x 70	29,5	1.880	289	213	0,694
3 G 1,5	8,9	110	26	26	34
3 G 2,5	9,8	145	36	34	20,4
3 G 4	11	200	49	44	12,7
3 G 6	12,1	265	63	56	8,45
3 G 10	14,3	405	86	73	4,89
3 x 16	16,4	595	100	79	2,68
3 x 25	20,7	955	127	101	1,73
3 x 35	23,1	1.275	158	122	1,23
3 x 50	26,8	1.750	192	144	0,86
3 x 70	29,6	2.370	246	178	0,603
3 x 95	35	3.140	298	211	0,457
3 x 120	39,8	4.115	346	240	0,357
3 x 150	44,7	5.130	399	271	0,286

Cross section (mm2)	Diameter (mm2)	Weight (Kg/km)	Open Air: 30°C (A)	Buried 20°C (A)	Voltage drop (V/A · km)
3 x 185	49,9	6.285	456	304	0,235
3x16+1x10	17,6	700	100	79	2,68
3x25+1x16	22,7	1.140	127	101	1,73
3x35+1x16	25	1.480	158	122	1,23
3x50+1x25	29,1	2.050	192	144	0,86
3x70+1x35	33,8	2.850	246	178	0,603
3x95+1x50	38,2	3.700	298	211	0,457
3x120+1x70	42,1	4.750	346	240	0,357
3x150+1x70	46,8	5.800	399	271	0,286
3x185+1x95	53,5	7.200	456	304	0,235
3x240+1x120	58,5	9.100	538	351	0,178
3 x 300	62,3	10.100	621	396	0,142
4 G 1,5	9,7	130	23	22	29,5
4 G 2,5	10,7	175	32	29	17,7
4 G 4	12	245	42	37	11
4 G 6	13,4	330	54	46	7,32
4 G 10	15,7	505	75	61	4,23
4 x 16	18,2	750	100	79	2,68
4 x 25	24,1	1.245	127	101	1,73
4 x 35	26,3	1.675	158	122	1,23
4 x 50	31,3	2.315	192	144	0,86
4 x 70	36,1	3.205	246	178	0,603
4 x 95	40,2	4.130	298	211	0,457
4 x 120	44,6	5.245	346	240	0,357
4 x 150	49,8	6.575	399	271	0,286
4 x 185	56,1	8.050	456	304	0,235
4 x 240	64,5	10.695	538	351	0,178
5 G 1,5	10,4	155	23	22	29,5
5 G 2,5	11,6	215	32	29	17,7
5 G 4	13,2	300	42	37	11
5 G 6	14,7	405	54	46	7,32
5 G 10	17,1	625	75	51	4,23
5 G 16	20,2	935	100	79	2,68
5 G 25	26,6	1.555	127	101	1,73
5 G 35	29,3	2.080	158	122	1,23
5 G 50	34,5	2.895	192	144	0,86
5 G 70	38,7	3.930	246	178	0,603
5 G 95	44,6	5.190	298	211	0,457
5 G 120	49,7	6.560	346	240	0,357
5 G 150	55,6	8.145	399	271	0,286
5 G 185	62,5	9.975	456	304	0,235
5 G 240	71,8	13.210	538	351	0,178

Maximum current capacity according to IEC 60364-5-52.
For other installation conditions, please refer to correction factors in the appendix to this catalogue.
See more technical data on the particular cable specification and on its Declaration of Performance (DoP)
Top Cable reserves the right to carry out any modification to the data sheets whatsoever without giving previous notice.
For more information please contact sales@topcable.com

